



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

RESPONSIVENESS SUMMARY TO COMMENTS RECEIVED DURING EPA COMMENT PERIOD For Proposed Air Quality Control Permit Number 1000159

El Paso Natural Gas Company, Wenden Compressor Station
Begin Comment Period : December 15, 1997
End Comment Period : January 31, 1998

The following comment was submitted by the EPA in their letter dated December 2, 1997

ATTACHMENT B

Comment 20: Attachment B. Section I.B. Emission Limits/Standards. The SIP contains an applicable requirement which has been excluded from this permit. Section R9-3-501.A of the current SIP states "Except as otherwise provided in these regulations relating to specific types of sources, the opacity of any plume or effluent shall not be greater than 40 percent as determined by reference method 9 in the Arizona Testing Manual." (According to the conformity test ADEQ included, this rule is equivalent to R18-2-702.B). Please add this requirement for the Solar Centaur H Gas Turbine Engine with the appropriate citation.

Response: Solar Centaur H Gas Turbine Engine is subject to the requirements of Article 9 which is the New Source Performance Standards whereas Article 7 applies only to existing sources. Existing Source is further defined as any source which does not have an applicable new source performance standard under Article 9. Further rule 702.B states that "Except as otherwise provided in this Article (meaning Article 7) relating to specific types of sources, the opacity of any plume or effluent shall not be greater than 40 percent, and...". Hence Rule R18-2-702.B is not applicable to this engine and therefore not included in the permit.

The following comments were submitted for Benson Compressor Station permit on December 7, 1997. Since these comments are applicable to the Wenden Compressor Station permit, they have been addressed here.

Comments on Attachment A : General Provisions

Comment 1: Section III.B.5: Permit Revision, Reopening, Revocation and Reissuance, or Termination for Cause. In order to clarify the permit requirements for the source, this section should state that, apart from reopenings to include new applicable requirements, a reopening does not result in resetting the 5-year permit term. Note that when a permit is reopened to include new applicable requirements, the entire permit

must go through the public review process to reset the 5-year permit term.

Response: To clarify that permit reopenings, except for permit reopenings to include new applicable requirements, do not result in resetting the five-year term, Section III.B.5 has been revised as follows:

- (i) Section III.B.5 has been renamed as Section III.C
- (ii) The following sentence has been added to the language:

"Permit reopenings for reasons other than those stated in paragraph III.B.1 of this Attachment shall not result in a resetting of the five year permit term."

Comment 2: *Section XIII. Reporting Requirements. As the permit is currently written, the permittee is referred first to Attachment B, and subsequently to Attachment A to determine the reporting requirements. To provide clarification for the source, language should be included which explicitly states that reports of required monitoring should be submitted every 6 months, in addition to permit deviation reporting required by Attachment A, Section XI.*

Response: To clarify the reporting requirements of the permit to the source, Section XIII has been rewritten to read as follows:

"Permittee shall comply with all of the reporting requirements of this permit. These include all of the following:

- (i) Compliance certifications pursuant to Attachment A, Section VII of this permit.
- (ii) Permit deviation reporting pursuant to Attachment A, Sections XI.A, XI.B, and XI.C of this permit.
- (iii) Reporting requirements listed in Attachment B, Section III of this permit."

Note: Making this modification results in Section III.B of Attachment "B" becoming redundant. Therefore, it was deleted.

Comment 3: *Section XVI. Facility Change Without Permit revision. While changes made to this section due to past EPA comments have been useful, we feel further revisions are necessary. We are concerned that ADEQ may not be made aware of changes that should be processed as a permit revision, but which the source mistakenly believes it can make without a permit revision or notification to ADEQ. As written, the permit slightly contradicts itself. Section XVI.C states "Changes that meet the criteria listed in subsections A, B, and C.1 of this Section are exempt from the notification requirements." Immediately following this, Section C.1 says "Examples of changes that do not require notification". While the first statement lists specific criteria a change must meet to avoid notification requirements, the words "Examples of" in the second statement allow a wide range of changes that do not require notification. This wide range of changes may allow changes to inadvertently slip past ADEQ without review.*

Thus, the words "Examples of" in Section XVI.C.1 should be omitted to narrow the changes exempt from notification requirements. Also, this section should state that a source may be required to prove a modification meets the criteria for exemption from the notification requirement.

Response: ADEQ agrees with EPA on this comment. To clarify the meaning of Section XVI, the following two changes have been made:

- (i) The last sentence of Section XVI.C has been deleted
- (ii) Section XVI.C.1 has been deleted.

With these changes, the permit does not address facility changes which would not require notification to ADEQ. ADEQ is committed to working one-on-one with various industrial source groups to develop lists of such facility changes that would not require notification.

In addition to these changes, the review process revealed that the permit shield exemption for facility changes without revisions and minor revisions had been omitted from the permit. Consequently, Section X X of Attachment A of the permit now reads as follows (also see response to Comment 5):

"Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XV.B of this Attachment and Section XVI of this Attachment."

Comment 4: *Section XVII.B. Testing Requirements. The first sentence of this section should be changed to read "Performance tests shall reflect representative operational conditions unless other conditions are provided in the applicable test o in this permit". Also, the EPA would like to clarify the definition of "performance tests", especially given the exclusion during start-up, shutdown and malfunction. Performance tests are used to demonstrate compliance. However, the EPA does not interpret this permit condition to prohibit testing during periods of start-up, shutdown, and malfunction, for enforcement action purposes. Please let us know if ADEQ has a different understanding of the meaning of this permit condition.*

Response: To clarify the intent of the testing requirements, Section XVII has been modified to read as follows:

XVII TESTING REQUIREMENTS

[A.A.C.R18-2-312]

A Operational Conditions During Testing

Tests shall be conducted during operation at the normal rated capacity of each unit, while operating at representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower

rate. Operations during start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

B Test Plan.....

Comment 5: Section XX. Permit Shield. The permit shield language in this section is very general, and could be interpreted to broadly apply to every requirement mentioned in the permit. Furthermore, the permit shield language as written could be assumed to apply to applicable requirements that are not included or addressed in the permit. There are two options for correcting this problem.

The first solution is to add language to Section XX which defines the applicable requirements as those listed in Attachment C. The new permit condition should read "Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as listed in Attachment "C", as of the date of permit issuance." Additionally, Attachment "C" must be modified to meet the requirements laid out in Comment #10 of this letter. A permit shield may not be provided for a given rule or portion of a rule unless the shielded requirement is fully captured by a permit condition (or is explicitly deemed not applicable).

The second solution is to completely eliminate Section XX in Attachment A, and instead explicitly request a permit shield in Attachment C. Again Attachment C must be modified to meet the requirements laid out in Comment #10 of this letter.

Response: Permit shield language (Section XX, Attachment A) modified to read as:

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XV.B of this Attachment and Section XVI of this Attachment.

In accordance with this change, Section II.A which now reads:

"The Permittee shall comply with all conditions of this permit, **which sets forth all applicable requirements** of Arizona air quality statutes and air quality rules...."

has been modified to read as:

"The Permittee shall comply with all conditions of this permit **including all applicable requirements** of Arizona air quality statutes and the air quality rules...."

Comments on Attachment B: Specific Conditions

Comment 6: Section II.A.1 Monitoring and Recordkeeping Requirements. This permit condition should describe the sulfur measuring technique, or cite the procedure from a regulation.

Response: The requirement in Section II.A.1 provides a method for continuous monitoring for particulate, opacity, and sulfur dioxide emission standards (Sections I.A.1, I.A.2, I.A.3, and I.A.4 of Attachment B). It has been established -in the technical review document and through numerous past discussions with EPA staff- that natural gas combustion results in minimal emissions, and that the emissions standards are protected by an ample margin of safety. It was decided, therefore, that imposing a rigorous monitoring schedule would not be required, and would be placing an unnecessary burden on the source. The Federal Energy Regulatory Commission's (FERC) Tariff agreement presented itself as a feasible alternative to the "daily" monitoring requirements of AAC R18-2-719.J. As stated in the technical review document, the Tariff agreement limits the sulfur content of the natural gas to 0.017 percent by weight of sulfur (an order of magnitude lesser than the standard). The Permittee cannot utilize natural gas that has a sulfur content greater than the aforementioned limit without violating the Tariff agreement. Specifying the monitoring requirement in this manner streamlines the permit conditions.

Comment 7: By explicitly laying out only one reporting requirement, this section could be misinterpreted to mean that no other exceedances need to be reported. As described in Sections VII (Compliance Certification) and XI (Permit Deviation Reporting) of Attachment A, any emissions in excess of the limits established by this permit must be reported. To avoid confusion, Section III.C should be deleted from this permit.

Response: Please see the Response to Comment 2.

Comment 8: Section IV.B. Testing Requirements. If the source does not use an EPA reference test method, the "alternate and equivalent test method" chosen must be clearly defined in the permit. Note that alternative test methods must be pre-approved by the EPA through the appropriate process, e.g., SIP revisions. Alternative test methods may not be approved for the first time through the Title V permit issuance process, due to time and resource constraints. For these specific permits, it is unclear to the EPA why test methods are specified for CO and NOx, since no limits exist for these pollutants. For future permits where test methods are included for pollutants with applicable emissions limits, the language in this section needs to be changed as described above. Please inform us of the reason for including tests for CO and NOx.

Response: Section IV.B of Attachment B now reads as follows:

TESTING REQUIREMENTS

A. General Electric Frame 3 Regenerative Gas Turbine

Permittee shall conduct a set of performance tests on this turbine. Performance tests shall be performed when the turbine is operated beyond fifteen cumulative

days. This performance test shall be completed within six months prior to this permit expiration. The test shall include all of the pollutants listed in Section IV.C. of this Attachment.

B. Solar Centaur H Simple Cycle Natural Gas Turbine Engine

[40 CFR 60.8, 40 CFR 60.335]

1. Permittee shall conduct annual performance test on this turbine to determine emissions of nitrogen oxides in accordance with the requirements of 40 CFR 60.335. Test method specified in section IV.C. of this Attachment shall be used.
2. Permittee shall also conduct a performance test to determine emissions of carbon monoxide once during the first annual test. Test method specified in section IV.C. of this Attachment shall be used.

C. Test Methods

Permittee shall use the following EPA approved Reference test methods to conduct performance tests for pollutants specified:

1. Nitrogen Oxides. EPA Reference Method 20.
2. Carbon Monoxide. EPA Reference Method 10.

Except for emissions testing required under Article 9 or Article 11, Permittee may submit an alternate and equivalent test method(s) **that is listed in 40 CFR Subpart 60, Appendix A** to the Director in any test plan for approval by the Director.

There are no emission limits or standards for NO_x and CO emissions at the Wenden Station. ADEQ believes that it is reasonable to expect to test a major source atleast once during the life of the permit. The Permittee has 4.5 years from the date of issuance of the permit to conduct the test. Hence the testing requiriement will be retained.

Comments on Attachment C: Applicable Regulations

Comment 9: As described in Comment # 5 above, there are two options for obtaining a permit shield. If Section XX (Permit Shield) of Attachment A is deleted completely, then Attachment C must include language that explicitly states a permit shield is granted to the permittee. For either option, an adoption date of the version of each rule that is being shielded from must be included in Attachment C.

Response: Please see Response to Comment 5. Attachment C now states : "Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements **in effect on the date of permit issuance:.....**".

Comments on Attachment E: Insignificant Activities

Comment 10: This section lists units which may be considered to be "insignificant activities". The purpose of defining insignificant activities is to specify those activities for which there may be less detail provided in the permit application. Ant insignificant activities at a Title V source are still subject to all applicable requirements. Some of the insignificant activities listed in Attachment E may be subject to generally applicable requirements, such as limits on opacity or requirements to control fugitive dust. To the extent that these insignificant activities are subject to unit-specific or generally applicable requirements, the permit must include these requirements and require these units to comply with these requirements. Attachment E should clearly state that these units are subject to all applicable requirements, and to the requirements of this permit. These units are also subject to the other requirements of Part 70, such as monitoring and compliance certifications. Please see White Paper 2, which addresses to what extent part 70 requirements may be minimized for these units.

Response: AAC R18-2-101.54 defines an "insignificant activity" as follows:

"Insignificant activity" means an activity in an emissions unit that is not otherwise subject to any applicable requirement and which belongs to one of the following categories:

- a. Landscaping.....etc.
- b. Gasoline storage tanks.....etc.
- c. Diesel and.....etc.
- d. Batch mixers.....etc.
- e. Wet sand.....etc.
- f. Hand-held or manually operated equipment.....etc.
- g. Powder....etc.
- h. Internal...etc.
- I. Lab equipment....etc.
- j. Any other activity which the Director determines is not necessary, because of it's emissions due to size or production rate, to be included in an application in order to determine all applicable requirements and to calculate any fee under this Chapter.

From this definition, it is clear that under Arizona rules for a unit to qualify as an insignificant activity, there should be no generally applicable requirements that the source may be subject to.

RESPONSIVENESS SUMMARY

To EPA Comments on Proposed Title V Permit
During Official 45-Day EPA Review Period
(March 15, 98 to April 30, 98)

for

Air Quality Control Permit No. 1000159

El Paso Natural Gas Company

Wenden Compressor Station

The following comments were submitted April 17, 1998:

Comment 1: The general provisions in this permit do not include all corrections previously agreed upon through a series of comment letters and conference calls with EPA. We have attached the general provisions from El Paso Natural Gas Benson Compressor Station permit which reflect all the necessary corrections. Please change the following sections of this permit to match the attached general provisions: II.A, III.C, XIII, XVI.C, XVII.A & B, and XX.

Response: The appropriate changes have been made.

Comment 2: Attachment B.I.A.2.a. Opacity Limitation. This permit condition limits the GE turbine engine to "40 percent opacity measured in accordance with the Arizona Testing Manual, Reference Method 9." As written, this condition could be read to imply an exclusive link between the emission limit and the method of determining compliance. Conditions in a Title V permit cannot limit the types of data or information that may be used to prove a violation of any applicable requirement, i.e., restrict the use of any credible evidence. To correct this problem, emission limits should be separated from the required method of monitoring by placing each in its respective section of the permit. Because no Method 9 tests will be required for this facility, simply removing the language referring to Reference Method 9 from the Emission Limits/Standards section will correct this problem. Also, note that when the SIP language itself links an emission limit with a specific test method, the SIP overrides any language in the permit. Thus, EPA will not comment on credible evidence problems for conditions specifying a source test method that is quoted directly from the rule in the SIP. However, we still encourage ADEQ to separate emission limits from test methods.

Response: ADEQ agrees with the EPA on this comment. The reference to the test method in Condition I.A.2.b of Attachment B has been deleted. The condition now reads as follows:

Permittee shall not cause, allow or permit to be emitted into the atmosphere from this stationary gas turbine engine, smoke for any period of time greater than ten consecutive seconds which exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.

Comment 3: Attachment B.I.B.1: Solar Centaur H Simple Cycle Gas Turbine Engine. The language

"Permittee shall operate the DLN combustor according to the manufacturer's specifications which results in meeting the emissions limits stated in this permit" is problematic. It could be read to imply that as long as the source operates according to the manufacturer's specifications, the source is considered to be in compliance with the emission limit of this permit. The NOx limit for this source, contained in Subpart GG of the NSPS, is applicable and enforceable, whether or not the source is operating according to the manufacturer's specifications. To correct this problem, please remove the phrase "which results in meeting the emission limits stated in this permit."

Response: The phrase "which results in meeting the emission limits stated in this permit." has been removed.

Comment 4: Attachment B.I.C.1.a. Open areas, Roadways, and Streets. This condition could create a problem by excluding credible evidence, as described in comment #2 above. However, unlike the case above, the test method is actually cited in the SIP rule itself. While we stated we cannot require a separation of the limit and the monitoring method in this situation, the language in the permit should be revised to match the language in the SIP rule exactly ("greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9"). We recognize this seems like a minor change, but have received guidance from within the EPA that the language "measured in accordance with" matches the language in the NSPS 40 CFR 60.8 directly, and is somehow more acceptable.

Response: ADEQ agrees with the EPA on this comment. Condition I.C.1.a of Attachment B has been revised to read as follows:

"Visible emissions from open areas, roadways, and streets shall not have an opacity greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9."

Comment 5: Attachment B.II.B.2 Fuel Nitrogen Content. To avoid confusion for the source, we recommend explaining this waiver in the technical support document and removing this condition altogether from the permit.

Response: Condition II.B.2. has been removed and the technical review document has been updated.

Comment 6: Attachment B.III. Reporting Requirements. Reports of required monitoring must be submitted every 6 months, pursuant to A.A.C. R18-2-306.A.5.a. As described in the preamble to 40 CFR Part 70, these reports must include all recordkeeping performed in place of monitoring, i.e., (for this permit) records of dust control measures required by Section II.B.1. Please add a new provision (III.D) requiring the Permittee to submit a report, at least every 6 months, of all records required under Section II.B. This citation for the new condition should be A.A.C. R18-2-306.A.5.a. For convenience, this requirement may be timed to coincide with the compliance certifications required by Section VII of Attachment A.

Response: ADEQ agrees with the EPA on this comment. A new condition III.D has been added to the

permit. Section III.D reads as follows:

“At the time the compliance certifications required by Section VII of Attachment “A” are submitted, the Permittee shall submit reports of all monitoring activities required by Section II of this Attachment performed in the six months prior to the date of the report.”

Comment 7: Attachment B.IV.C Test Methods. As agreed upon in earlier conference calls with EPA, please add the following underlined language to the last sentence of this condition: “...Permittee may submit an alternate and equivalent test method(s) that is listed in 40 CFR Subpart 60, Appendix A to the Director..”

Response: The language has been added.

OTHER COMMENTS:

Comment 8: This permit should have both the technical support document and a chart showing a comparison of the current county rules and the SIP rules attached to it. We found the odd-numbered pages of the technical support documents bound to the source's application; please send the entire technical support document for our review. We would also like to see the results ppm NOx) of the initial performance tests conducted on the Solar Centaur turbine following the installation of the SoLoNox technology in 1994 (if these are not already included in the remaining pages of the technical support document)

Response: The technical support document, the rule conformity test and the performance tests have been attached to this response.